

FIG. 1A

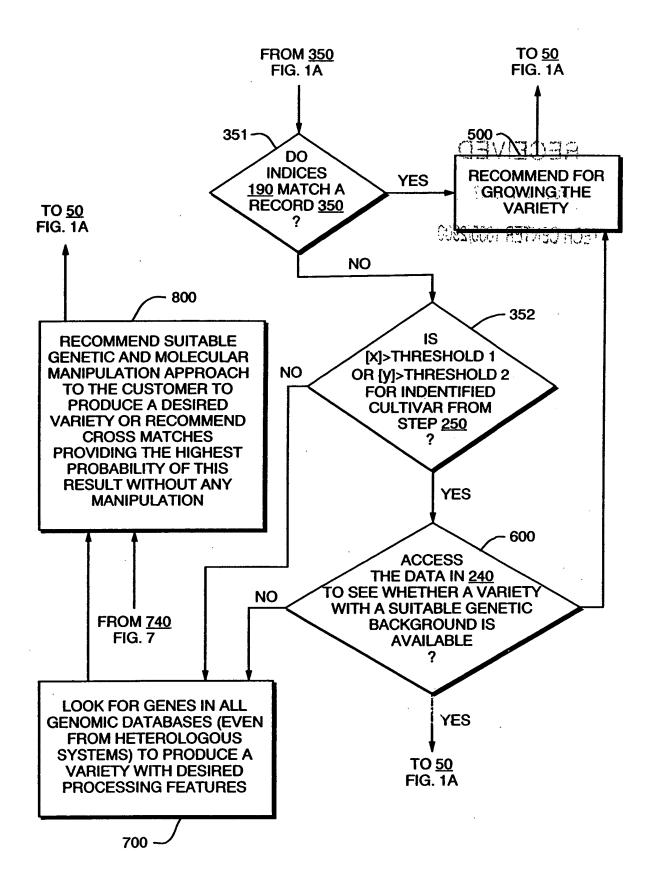
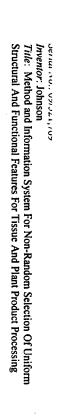
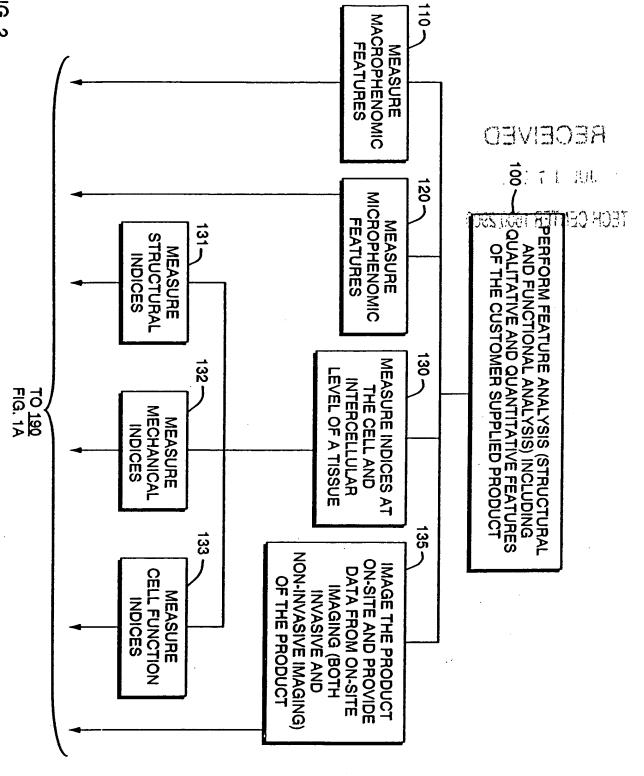


FIG. 1B





251a-250a -**GENETIC INFORMATION GENETIC INFORMATION** CULTIVAR 1 254a CULTIVAR 1 253a FRUIT SIZE GENE(S) FRUIT SIZE GENE(S) f1f2f3f4 f1f2f3f4 **β-CAROTENE GENE(S)** □ □ □ β -CAROTENE GENE(S) **B**₁ **B**₁ ازال LYCOPENE CONTENT LYCOPENE CONTENT GENE(S) hp1 GENE(S) hp1 TECH CENTRA 1600/2909 RADIO TIURA **FRUIT SUGAR** GENE(S) S1 GENE(S) S1 **GROWTH CONDITIONS GROWTH CONDITIONS INFORMATION SET 2 241a** INFORMATION SET 1 240a DAY TEMPERATURE DAY TEMPERATURE 23-25°C 15-20°C **SOIL FERTILITY 4000 SOIL FERTILITY 6000** (kg NITROGEN/HA) (kg NITROGEN/HA) **SOIL MOISTURE 20% SOIL MOISTURE 30%** PRODUCT FEATURE PRODUCT FEATURE RANGE SET 2 257a RANGE SET 1 256a FRUIT SIZE 70-80mm FRUIT SIZE 50-60mm β -CAROTENE 4-6ppm β -CAROTENE 8-10ppm LYCOPENE 70-80ppm LYCOPENE 90-100ppm **TOTAL FRUIT TOTAL FRUIT SUGARS 65-70% SUGARS 65-70%**

TO FIG. 3B

252a -

250b -

GENETIC INFORMATION GENETIC INFORMATION CULTIVAR 1 255a CULTIVAR 2 253b

- FRUIT SIZE GENE(S) f1f2f3f4
- **B-CAROTENE GENE(S)** B₁
- LYCOPENE CONTENT GENE(S) hp1
- **FRUIT SUGAR** GENE(S) S1

- FRUIT SIZE GENE(S) f₁f₂
- β -CAROTENE GENE(S) B₁B₂
- LYCOPENE CONTENT: GENE(S) hp1hp2
- FRUIT SUGAR COORS RETVISOR OF GENE(S) \$1\$2

GROWTH CONDITIONS INFORMATION SET 3 242a

- DAY TEMPERATURE 27-30°C
- **SOIL FERTILITY 2000** (kg NITROGEN/HA)
- **SOIL MOISTURE 50%**

GROWTH CONDITIONS INFORMATION SET 1 240b

- DAY TEMPERATURE 15-20°C
- **SOIL FERTILITY 6000** (kg NITROGEN/HA)
- **SOIL MOISTURE 20%**

PRODUCT FEATURE RANGE SET 1 258a

- FRUIT SIZE 90-100mm
- β -CAROTENE 1-2ppm
- LYCOPENE 55-65ppm
- **TOTAL FRUIT SUGARS 65-70%**

PRODUCT FEATURE RANGE SET 1 256b

- FRUIT SIZE 55-60mm
- β -CAROTENE 9-10ppm
- LYCOPENE 95-100ppm
- **TOTAL FRUIT** SUGARS 65-70%

FROM FIG. 3A

TO FIG. 3C

251b-

252b -

	GENETIC INFORMATION CULTIVAR 2 254b	GENETIC INFORMATION CULTIVAR 2 255b
	• FRUIT SIZE GENE(S) f1f2	FRUIT SIZE GENE(S) f ₁ f ₂
	• β-CAROTENE GENE(S) B ₁ B ₂	• β-CAROTENE GENE(S) B ₁ B ₂ QEVIBDE
	 LYCOPENE CONTENT GENE(S) hp₁hp₂ 	• LYCOPENE CONTENT GENE(S) hp1hp2
	• FRUIT SUGAR GENE(S) \$1\$2	• FRUIT SUGAR GENE(S) \$1520000 RETURNS
	GROWTH CONDITIONS INFORMATION SET 2 241b	GROWTH CONDITIONS INFORMATION SET 3 242b
	• DAY TEMPERATURE 23-25°C	DAY TEMPERATURE 27-30°C
	SOIL FERTILITY 4000 (kg NITROGEN/HA)	SOIL FERTILITY 2000 (kg NITROGEN/HA)
	SOIL MOISTURE 30%	SOIL MOISTURE 50%
	PRODUCT FEATURE RANGE SET 2 257b	PRODUCT FEATURE RANGE SET 1 <u>258b</u>
	FRUIT SIZE 75-80mm	FRUIT SIZE 20-30mm
	• β -CAROTENE 5-6ppm	• β -CAROTENE 0.1-0.3ppm
	LYCOPENE 75-80ppm	LYCOPENE 20-25ppm
	TOTAL FRUIT SUGARS 65-70%	TOTAL FRUIT SUGARS 65-70%
-		

FROM FIG. 3B

TO FIG. 3D

250x -

251x —

GENETIC INFORMATION CULTIVAR X <u>253x</u>	GENETIC INFORMATION CULTIVAR X <u>254X</u>			
• FRUIT SIZE GENE(S) f1	FRUIT SIZE GENE(S) f 1			
• β -CAROTENE GENE(S) B ₁ B ₂ B ₃ B ₄	• β-CAROTENE GENE(S) (B ₁ B ₂ B ₃ B ₄			
 LYCOPENE CONTENT GENE(S) hp₁hp₂hp₃hp₄ 	• LYCOPENE CONTENT GENE(S) hp1hp2hp3hp4			
• FRUIT SUGAR GENE(S) \$1\$2\$3\$4	• FRUIT SUGARS (1997年) GENE(S) \$1\$2\$3\$4			
GROWTH CONDITIONS INFORMATION SET 1 240x	GROWTH CONDITIONS INFORMATION SET 2 241x			
• DAY TEMPERATURE 5-20°C	• DAY TEMPERATURE 23-25°C			
 SOIL FERTILITY 6000 (kg NITROGEN/HA) 	SOIL FERTILITY 4000 (kg NITROGEN/HA)			
SOIL MOISTURE 20%	SOIL MOISTURE 30%			
PRODUCT FEATURE RANGE SET 1 256x	PRODUCT FEATURE RANGE SET 2 <u>257X</u>			
FRUIT SIZE 50-60mm	FRUIT SIZE 70-80mm			
• β -CAROTENE 6-8ppm	• β-CAROTENE 1-2ppm			
LYCOPENE 75-85ppm	LYCOPENE 55-65ppm			
TOTAL FRUIT SUGARS 50-55%	TOTAL FRUIT SUGARS 55-65%			

FROM FIG. 3C

TO FIG. 3E

252X —

GENETIC INFORMATION CULTIVAR X 255X

- FRUIT SIZE GENE(S) f₁
- β -CAROTENE GENE(S) B₁B₂B₃B₄
- LYCOPENE CONTENT GENE(S) hp1hp2hp3hp4
- FRUIT SUGAR GENE(S) \$1\$2\$3\$4

RECEIVE

SSTI III.

SON CENTER SEC

GROWTH CONDITIONS INFORMATION SET 3 242x

- DAY TEMPERATURE 27-30°C
- SOIL FERTILITY 2000 (kg NITROGEN/HA)
- SOIL MOISTURE 50%

PRODUCT FEATURE RANGE SET 3 258x

- FRUIT SIZE 90-100mm
- β -CAROTENE 1-2ppm
- LYCOPENE 55-65ppm
- TOTAL FRUIT SUGARS 65-70%

FROM FIG. 3D

Serial (NO.. U7)241, (OY)
Inventor: Johnson
Title: Method and Information System For Non-Random Selection Of Uniform
Structural And Functional Features For Tissue And Plant Product Processing

RECEIVED

3365 7 1 JUL

TECH CENTER 1600,2800

CULTIVAR 1 FRUIT SIZE 80 mm ± SE

25°C % % % 35°C

CULTIVAR 1

- GROWN AT 18°C - FRUIT SIZE 60 mm ± SE

CULTIVAR 1 FRUIT SIZE 25 mm ± SE

FIG. 4A

RECEIVED FOR CENTER 1800/2900

CULTIVAR 1
FRUIT SIZE 95 mm ± SE

ဖ င 30°C CULTIVAR 2 FRUIT SIZE 20 mm ± SE

- GROWN AT 25°C - FRUIT SIZE 80 mm ± SE

CULTIVAR 1 AND 2

FIG. 4B

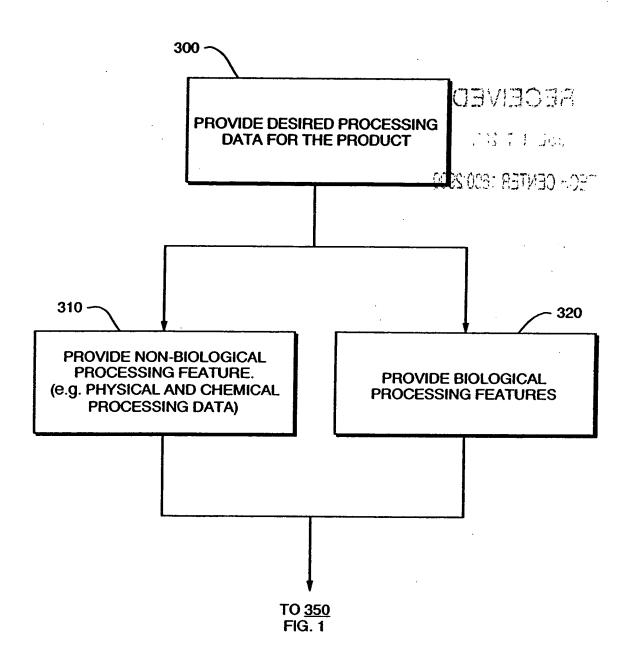


FIG. 5

				_
 LYCOPENE 55-65 ppm SIZE 90-100 mm TOTAL FRUIT SUGARS 65-70% β-CAROTENE CONTENT 1-2 ppm 	PRODUCT PROCESSING FEATURE RANGE SET 1 <u>354a</u>	 MILLING TIME 15 MIN. HEATING TEMP 90°C 	PRODUCT PROCESSING DATA SET 1 3528	350a
 LYCOPENE 70-80 ppm SIZE 70-80 mm TOTAL FRUIT SUGARS 65-70% β-CAROTENE CONTENT 4-6 ppm 	PRODUCT PROCESSING FEATURE RANGE SET 2 <u>354b</u>	• MILLING TIME 10 MIN. • HEATING TEMP 80°C	PRODUCT PROCESSING DATA SET 2 <u>352b</u>	350b
 LYCOPENE 90-100 ppm SIZE 50-60 mm TOTAL FRUIT SUGARS 65-70% β-CAROTENE CONTENT 8-10 ppm 	PRODUCT PROCESSING FEATURE RANGE SET n <u>354x</u>	• MILLING TIME 5 MIN. • HEATING TEMP 70°C	PRODUCT PROCESSING DATA SET n <u>352X</u>	350x

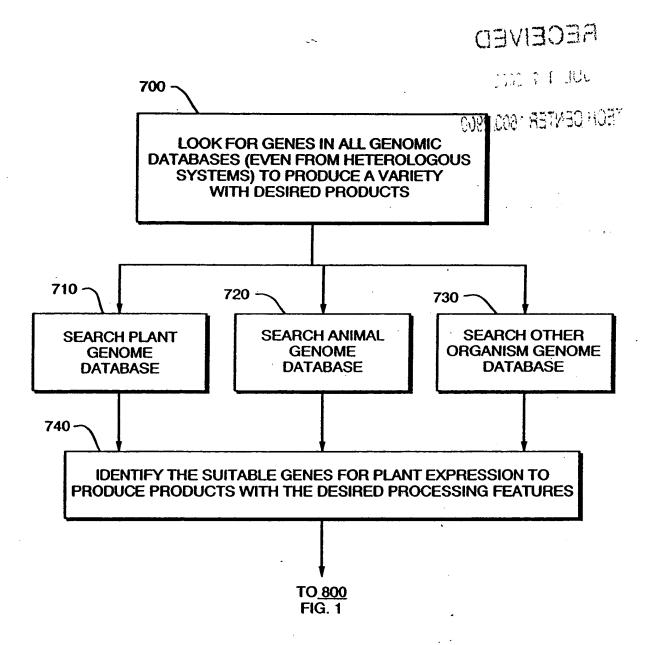


FIG. 7

Serial No.: 091521, 169

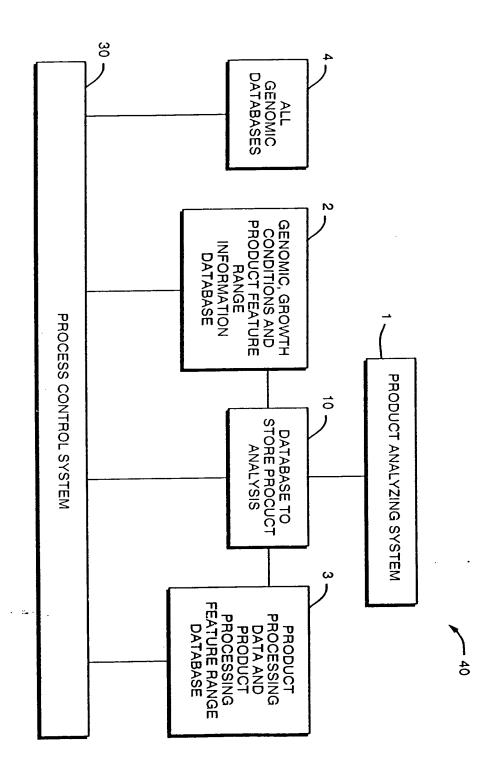


FIG. 8